

**AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions and listings of claims in the application:

1. (Currently Amended) A distributed computer system comprising:
  - a first main system and a second main system, both to execute applications in cooperation with a human user; and
  - a service system to evaluate problems in the first and second main systems, the service system comprising:
    - a service module configured to collect problem related data from the main systems, the problem related data representing a problem identified about data in at least one of the first or second main systems;
    - an acquisition module configured to acquire knowledge representations, the knowledge representations defining solution identification rules;
    - a knowledge module configured to store the knowledge representations; and
    - an inference module configured to process problem related data with knowledge representations in a sequential order, to identify solutions and forward the solutions through the service module to the main systems, wherein the identified solutions are applied to solve the problems, and wherein the first and second main systems have first and second auxiliary systems, respectively, with auxiliary knowledge representations to evaluate problems in at least one of

the first or second main systems and to escalate problem evaluation to the service system, and further wherein the first and second auxiliary systems are adapted to forward, to the service system, preliminary solutions based on the auxiliary knowledge representations when a problem is escalated to the service system.

2. (Cancelled).

3. (Previously Amended) The computer system of claim 1, wherein the knowledge representations in the service system are enhanced in comparison to the auxiliary knowledge representations in the first and second auxiliary systems.

4. (Original) The computer system of claim 3, wherein the knowledge representations are enhanced in volume, actuality and complexity.

5. (Previously Amended) The computer system of claim 1, wherein the first and second auxiliary systems forward problem data to the service system after preliminary data analysis by processing with the auxiliary knowledge representations.

6. (Previously Amended) The computer system of claim 1, wherein the service system updates the auxiliary knowledge representations in the first and second auxiliary systems.

7. (Previously Amended) The computer system of claim 1, wherein the first and second auxiliary systems each have a service module to collect problem related data from the main systems, an acquisition module to acquire knowledge representations, a knowledge module to store the knowledge representations, and an inference module for processing problem related data with knowledge representations to identify solutions, the inference module for selectively forwarding the solutions through the service module to the main systems and forwarding data to the service system.

8. (Original) The computer system of claim 1, wherein the inference module applies the knowledge representations for both main systems and distinguishes version differences of the main systems by looking up in a check lexicon.

9. (Currently Amended) A method for solving a problem in at least one main computer system by expert systems, comprising:

detecting the problem in the main system;

processing problem related data with a first set of knowledge representations of a first expert system to search for a solution to identify a first set of

search results, the problem related data representing a problem identified about data in the main system, and the first set of knowledge representations defining solution identification rules;

depending on processing results, selectively solving the problem by the first expert system or forwarding the problem related data together with the first set of search results to a second expert system with a second set of knowledge representations, wherein the first set of knowledge representations defining define solution identification rules and the first set of search results comprise preliminary solutions to the problem;

processing the problem related data, the first set of search results and the second set of knowledge representations by the second expert system to search for the solution to identify a second set of search results; and

depending on processing results, selectively solving the problem by the second expert system or presenting the first and second set of search results and problem related data to a human.

10. (Previously Amended) A computer program product stored in a computer-readable medium comprising program code means for performing the method of claim 9 when the computer program product is run on a computer.

11. (Cancelled).

12. (Original) The computer system of claim 1, wherein at least one system executes an enterprise resource planning application.
13. (Original) The computer system of claim 1, wherein at least one system is implemented as an R/3 system.
14. (Previously Presented) The computer system of claim 1, wherein an inference module processes the problem related data with knowledge representations in a dynamic adaptive order or a hierarchical order.